

# FARMLAND INDEX

## NCREIF TOTAL FARMLAND INDEX POSTS SIXTH CONSECUTIVE QUARTER OF RECORD VALUE

FARMLAND TOTAL RETURNS							
	Total NPI	Total Farmland Index	Pacific West	Pacific Northwest	Corn Belt	Delta	Southeast
3rd Qtr 2022	0.57	1.98	1.44	0.83	3.80	2.47	3.25
2nd Qtr 2022	3.23	1.45	0.37	1.42	3.06	2.23	2.07
One Year	16.08	10.21	5.13	4.63	26.29	13.71	7.51
Three Year	9.91	6.50	4.03	3.92	13.86	8.06	5.92
Five Year	8.62	6.33	5.54	4.65	9.14	7.07	6.84
Seven Year	8.45	6.62	7.11	5.83	5.96	5.81	7.30
Ten Year	9.48	9.47	12.30	7.78	7.05	7.45	8.06
Inception	9.17	10.63	12.44	6.70	10.35	9.51	8.52

The number of properties in the NCREIF Farmland Index (NFI) increased by 6 in Q3 2022 bringing the total property count to 1,306, and the NFI's market value reached a new record of \$14.9 billion. At the end of Q3 2022, the NFI was comprised of \$9.1 billion (61%) of annual cropland and \$5.8 billion (39%) of permanent cropland. Directly operated permanent crop properties represented \$4.2 billion (29%) of the NFI, while leased cropland properties accounted for \$10.6 billion (71%).

FARMLAND INCOME AND APPRECIATION RETURNS					
	Income	Appreciation	Total Return	Property Count	Market Value
3rd Qtr 2022	0.81	1.17	1.98	1,306	14,859,663,577
2nd Qtr 2022	0.60	0.85	1.45	1,300	14,599,765,279
One Year	3.73	6.31	10.21		
Three Year	3.87	2.56	6.50		
Five Year	4.08	2.19	6.33		
Seven Year	4.38	2.17	6.62		
Ten Year	5.46	3.89	9.47		
Inception	6.43	4.06	10.63		

Regionally, the Pacific West (39%), Delta States (19%), and Corn Belt (12%) comprised over 70% of the NFI, collectively. The other 29% is represented by the Mountain (8%), Pacific Northwest (7%), Southeast (5%), Lake States (4%), Southern Plains (2%), Northern Plains (3%), Appalachian (1%), and Other (<1%).

In Q3 2022, the NFI reported strong quarterly performance, surpassing the Q3 results experienced in 2021. Over the prior four quarters, the NFI's cumulative total return was 10.21%, resulting from an income return of 3.73% and appreciation of 6.31%. Annual cropland's rolling 4-quarter return was 14.43%, an increase of approximately 48 basis points as compared to

FARMLAND PROPERTY DISTRIBUTION BY PROPERTY TYPE AND REGION		
Property Type	Number of Properties	Market Value \$ Millions
Annual Cropland	986	9,085
Permanent Cropland	320	5,775
<b>Total</b>	<b>1,306</b>	<b>14,860</b>
Pacific West	283	5,850
Pacific Northwest	102	989
Corn Belt	407	1,837
Delta States	140	2,816
Southeast	69	812
Mountain	91	1,161
Southern Plains	17	295
Lake States	138	602
Northeast	8	36
Appalachian	7	103
Northern Plains	48	377
Other	59	497
<b>Total</b>	<b>1,369</b>	<b>15,375</b>

Q2 2022 due to increases in income and appreciation returns. Permanent cropland posted another positive quarter of total return, reporting a rolling 4-quarter total return of 4.05%.

Over the past four quarters, the annual cropland sub-index generated an income return of 3.55% and appreciation of 10.60%, resulting in a total return of 14.43%. This result was almost double the rolling 4-quarter total return as of Q2 2021 (7.82%) and is also above the previous quarter's rolling 4-quarter return (13.95%).

From a regional standpoint, total returns over the past four quarters ranged from 26.25% in the Corn Belt to 7.85% in the Pacific Northwest. The Corn Belt, Lake States, Delta States, and Southeast all reported rolling 4-quarter total returns exceeding 10%.

As of Q3 2022, the permanent cropland sub-index reported a rolling 4-quarter income return of 4.00% and appreciation of 0.05%, resulting in a total return of 4.05%. Recent returns produced by the permanent cropland sub-index are near 20-year lows. It is noteworthy that over the period represented in the chart below, almonds and wine grapes have comprised over 50% of the permanent cropland sub-index on average. The chart below demonstrates permanent crop returns have experienced periods of significantly higher and lower returns as compared to the annual cropland sub-index.

CROP TYPE DISTRIBUTION					
Crop Type	Number of Properties	Market Value \$ Millions	1 year returns ending 9/30/2022		
			Income Return	Appreciation Return	Total Return
Annual-Commodity	792	5447	3.3%	14.41%	18.05%
Annual-Fresh Produce	46	1078	3.99%	3.26%	7.34%
Annual-All Other	148	2559	3.89%	6.21%	10.28%
<b>Annual-Total</b>	<b>986</b>	<b>9085</b>	<b>3.55%</b>	<b>10.6%</b>	<b>14.43%</b>
Permanent-Apples	21	308	3.2%	-3%	0.12%
Permanent-Almonds	65	1049	3.22%	-0.51%	2.68%
Permanent-Citrus	25	389	2.1%	-1.2%	0.87%
Permanent-Pistachios	31	1028	5%	0.35%	5.38%
Permanent-Wine Grapes	96	2128	4.05%	0.57%	4.63%
Permanent-All Others	82	874	4.9%	0.88%	5.81%
<b>Permanent-Total</b>	<b>320</b>	<b>5775</b>	<b>4%</b>	<b>0.05%</b>	<b>4.05%</b>
<b>TOTAL</b>	<b>1306</b>	<b>14860</b>	<b>3.73%</b>	<b>6.31%</b>	<b>10.21%</b>

Permanent – All Others accounted for the highest return over the prior 4 quarters at 5.81% while apples accounted for the lowest return, 0.12%. The rolling 4-quarter returns for all major permanent crop categories continue to lag their 5-year and 10-year returns. Almonds (1.67%) and pistachios (1.22%) produced the strongest permanent crop returns in Q3 2022. On the other hand, Citrus (0.25%) and apples (-0.05%) represented the lowest permanent crop returns during the quarter. The rolling 4-quarter performance of leased permanent cropland exceeded the performance of directly operated permanents by 210 basis points, outperforming in terms of income and appreciation.

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